PART II

BUILDING STRONG NEIGHBORHOODS

CHAPTER 4: LAND USE

Land use refers to how land is currently used and how it should be used in the future. Population and economic trends help predict future needs for various land uses. The City of Fort Worth guides land use to ensure that land resources appropriately encourage economic development, promote a variety of housing choices, preserve natural and historic resources, and accommodate transportation routes and public facilities, in order to protect and improve Fort Worth's quality of life.

EXISTING CONDITIONS AND TRENDS

Existing Land Use

An understanding of Fort Worth's land use and zoning helps to put into perspective the City's development history and how Fort Worth may continue to develop. Land use data for Fort Worth became available in 1960 when the City's size was 145 square miles, less than half its current size. At that time, 37 percent of Fort Worth's land was vacant. Today, Fort Worth encompasses 350 square miles, 27 percent of which is vacant. One-third of the City's undeveloped land contains floodplains, steep slopes, or other development constraints limiting its development potential. Included in the City's over 350 square miles are 14 square miles of limited purpose annexation areas, where City zoning and development regulations apply but City taxes are not assessed. The approximate land area located outside the city limits but within its extraterritorial jurisdiction (ETJ) is 310 square miles. Most of the land within Fort Worth's ETJ is residential or undeveloped.

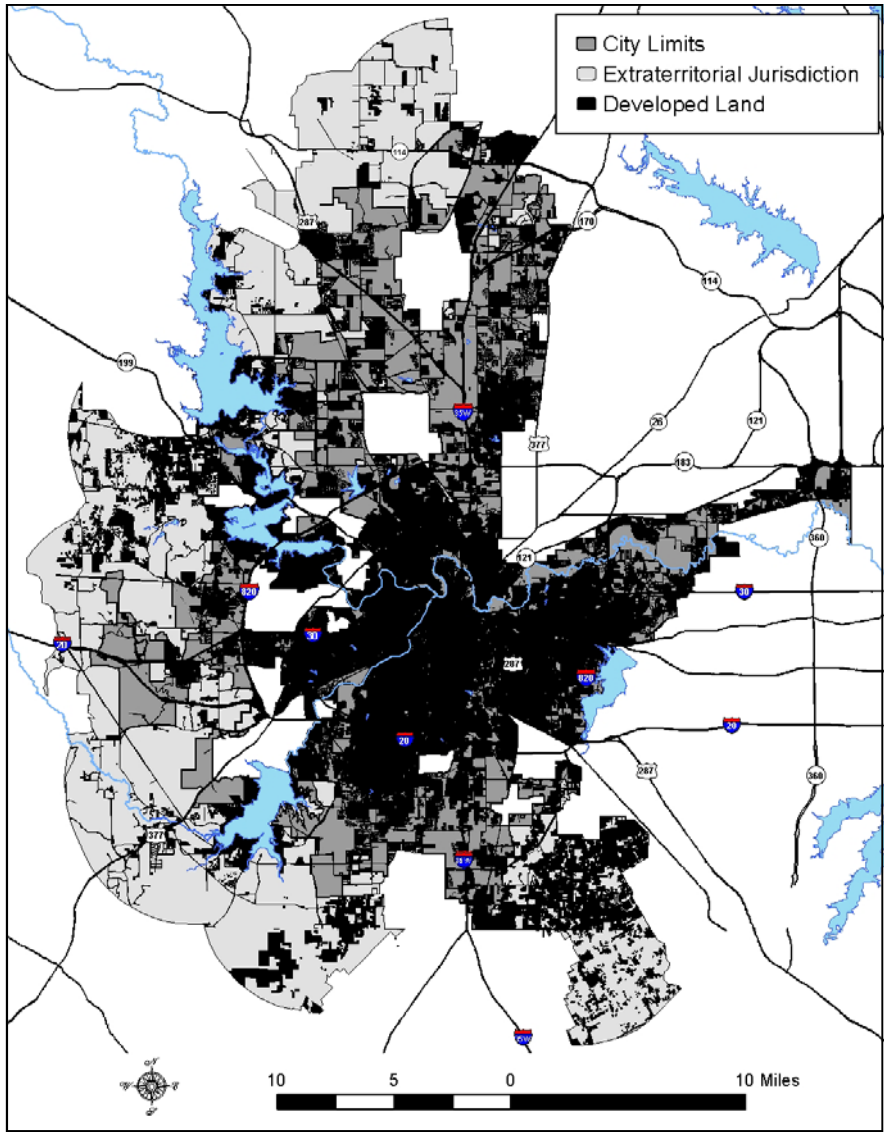
According to the North Central Texas Council of Governments (NCTCOG), single-family, low density residential (including duplexes and townhouses), and manufactured housing occupied the greatest amount of developed land area in Fort Worth in 2005, together totaling 24 percent. This compares to 43 percent in Arlington, 42 percent in Dallas, and 33 percent in Austin. Multifamily uses in 2005 represented a comparatively small proportion of Fort Worth's developed land area with 2.2 percent (or 1.6 percent of the total land area) compared to 5.8 percent of developed land uses in Dallas, 4.5 percent in Arlington, and 5.2 percent in Austin.

Fort Worth has a strong industrial base with industrial land uses occupying six percent of the developed land in Fort Worth, which compares to nine percent in Dallas, but is higher than Arlington at three percent and Austin at five percent. Fort Worth has a smaller percentage of its developed land area in commercial use at five percent, compared to Arlington at seven percent, Dallas at eight percent, and Austin also at eight percent. The pie chart on page 31 depicts the breakdown of existing land uses in 2005. NCTCOG expects to update existing land use data in late 2011.

Current Zoning

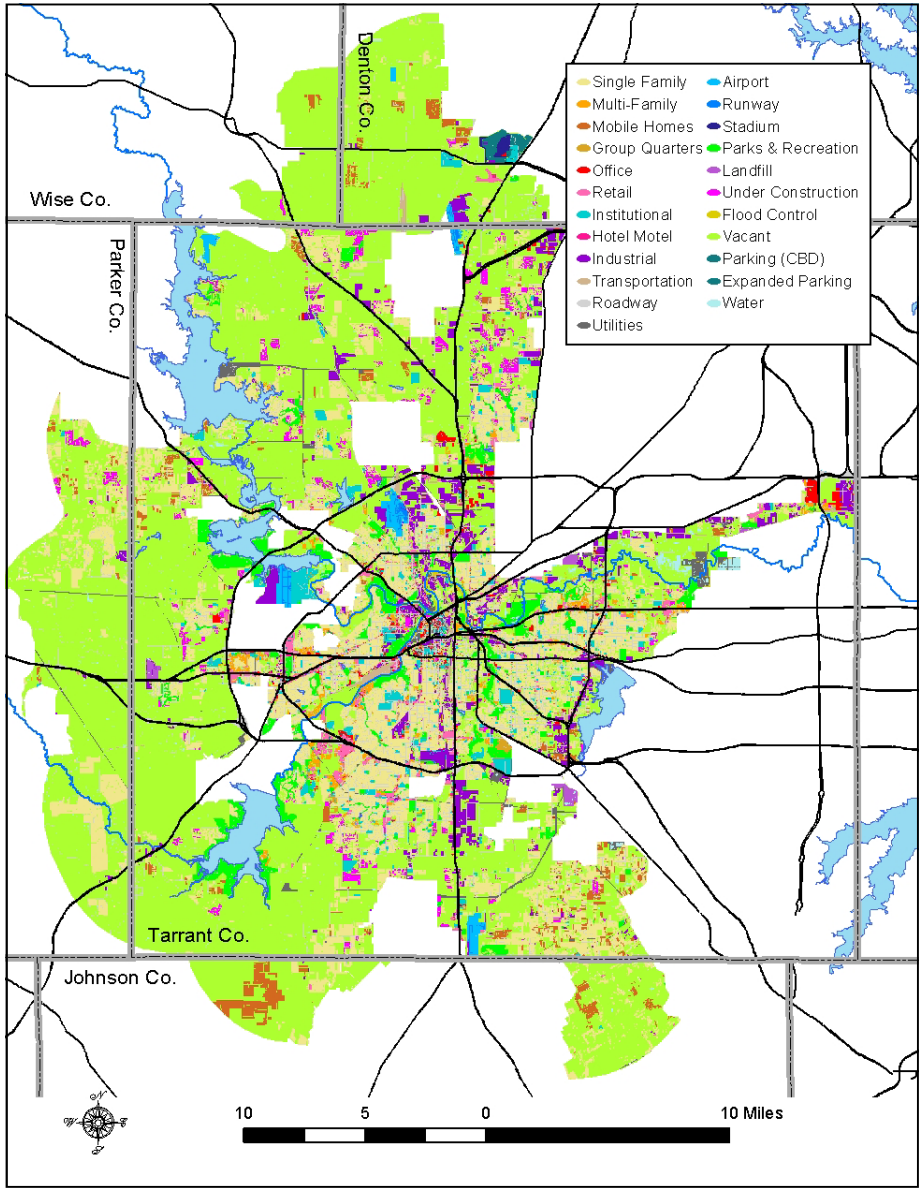
The land within the city limits of Fort Worth is divided into different zones that permit certain land uses and prohibit others. Zoning regulations also include development standards such as those addressing building height and setbacks. Although 47 separate zoning districts exist, seven are inactive, and six are overlay districts. The remaining districts can be grouped into eight major categories. The

Developed Land in Fort Worth and Its Extraterritorial Jurisdiction, 2005



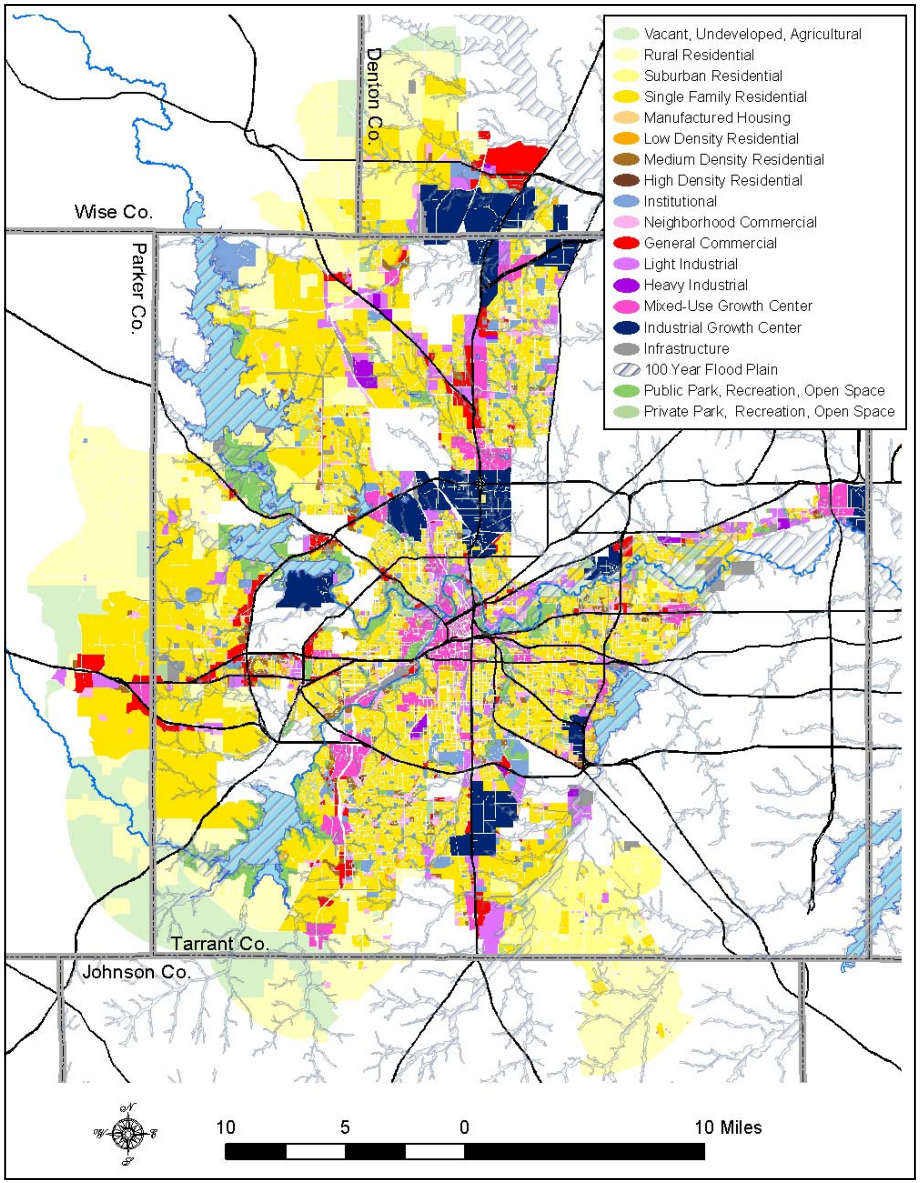
In 2005, approximately 27 percent, or 70,842 acres, of the land in Fort Worth's city limits was undeveloped. The development pattern is irregular, and non-contiguous, and less efficient than it could be. NCTCOG expects to provide updated existing land use data in late 2011. *(Source: North Central Texas Council of Governments, 2006.)*

Existing Land Use
City of Fort Worth and ETJ, 2005



The most prevalent existing land use is single-family. Much of the city and its ETJ is currently undeveloped. *(Source: North Central Texas Council of Governments, 2006.)*

Future Land Use Plan
City of Fort Worth and ETJ



A comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

Land uses are planned for all land within the current city limits and for land in the ETJ that could be available for development over the next 20 years. See Appendix C for individual sector maps at a larger scale. *(Source: Planning and Development Department, 2011.)*

largest zoning district category is Single-family and Low Density Residential, representing approximately 52 percent of the total land within the city limits. This zoning category includes most of the 21 percent of developed land containing single-family and low-density residential uses.

The next largest zoning category, Industrial, makes up approximately 19 percent of the total land area in the city. However, only six percent of the developed land within the City is used for industrial purposes. Similarly, 11 percent of the City is zoned Commercial, while only five percent of developed land is used for commercial purposes. Although more complex to administer than standard zoning, PD Planned Development districts are often used to adapt a base zoning district by adding or removing certain uses. The pie chart to the lower right depicts the breakdown of land area by zoning category.

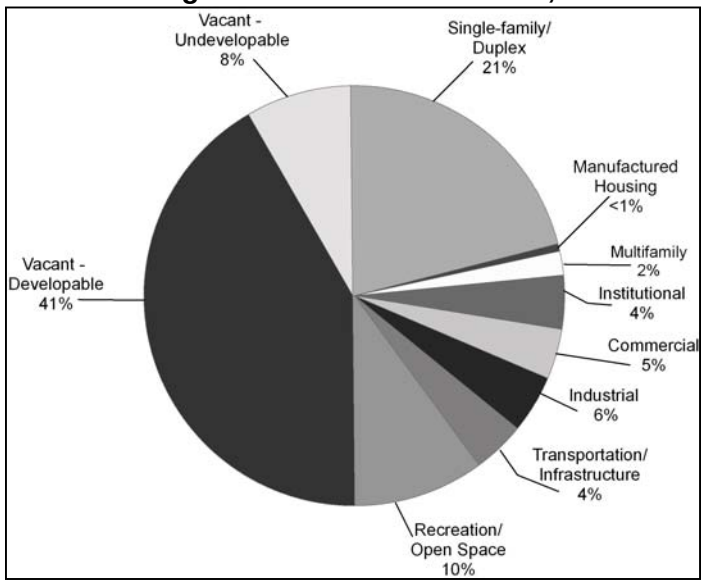
Four of the City's zoning districts are mixed-use (MU) districts. The MU districts were created beginning in 1991 to encourage the development and redevelopment of certain areas within the city especially pedestrian-oriented urban villages to promote economic revitalization and private sector investment in former commercial centers. Similar to MU districts, the Near Southside (NS) and Trinity Uptown (TU) districts are designed to accommodate a mix of uses in a pedestrian-oriented environment. However, the NS and TU districts are somewhat different than MU in that they more specifically describe and depict the desired urban form in their respective locations. These form–based zoning districts allow significant flexibility in the current and future use of land, while more directly and straightforwardly guiding development and redevelopment projects. Additional form-based zoning districts are anticipated in transit-oriented development (TOD) areas around planned commuter rail stations, as well as in other mixed-use growth centers. Further information on Mixed-Use Growth Centers and Urban Villages is provided in this chapter. More information on the TEX commuter rail corridor and associated TOD areas is provided in Chapter 11: Transportation.

Projected Land Use

Existing land use trends and population and employment projections are used to project the demand for new land uses. Based on land annexation trends over the last 15 years, it is expected that the city limits will expand from 350 square miles in 2011 to 372 square miles by 2031, or approximately 1.2 square miles per year. Between 2000 and 2032, the population is expected to grow 50 percent, and the amount of developed land can be expected to increase by approximately the same percentage, from 163 square miles to 245 square miles. Applying a straight line projection, 69 percent of the City's total land area should be developed in the year 2032, compared to only 46 percent in 2000. This straight line projection assumes a more efficient development pattern than currently exists. Over the past several decades, the increase in developed land has outpaced population growth. Much of this growth is expected in areas with new and/or improved transportation routes, including I-35W North, Chisholm Trail/SH-121T and the planned TEX commuter rail line.

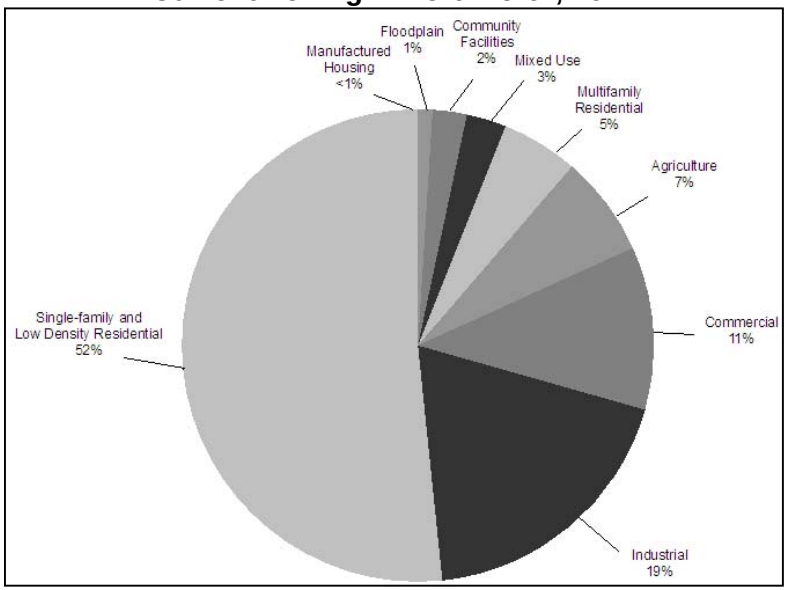
Appendix C contains a future land use map for each of the 16 planning sectors within the city, as well as land use policies specific to each sector. The land use policies and related maps of the Comprehensive Plan guide future land use decisions. Zoning,

Existing Land Uses in Fort Worth, 2005



Single-family and duplex land uses constitute 21 percent of Fort Worth's total land area. *(Source: North Central Texas Council of Governments, 2005.)*

Current Zoning in Fort Worth, 2011



Approximately 30 percent of the city is zoned for commercial or industrial uses, yet only 11 percent of developed land is currently used for these purposes. Over three percent of the city is zoned for mixed uses. *(Source: Planning and Development Department, 2011.)*

annexations, special exceptions, design review, and other land use decisions are made after consulting the adopted maps and Comprehensive Plan policies.

Factors That Influence Land Use

A number of factors influence land use needs and decisions. Some of the most important factors are discussed below.

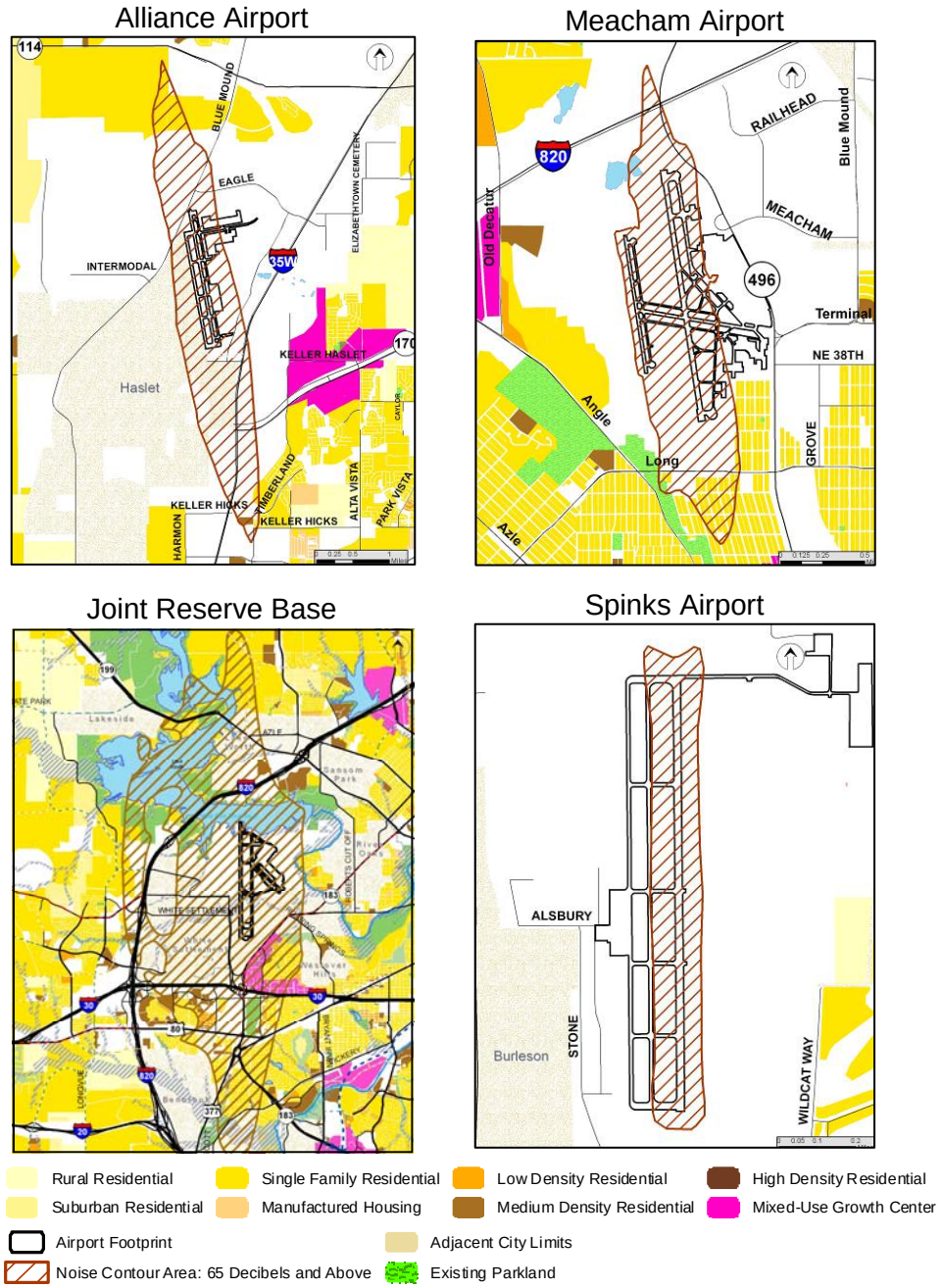
Population Growth and Housing Demand – As the population grows, the demand for residential land is expected to increase by an average rate of one acre for every ten new residents. The current average density is approximately four dwelling units per acre for all types of residential uses. This average residential density may increase as new, higher-density housing types that respond to changing demographic and market trends gain in popularity, as is occurring in and near downtown, along W. 7th Street, and in the Near Southside. Housing choices are expected to reflect a greater preference for walkable urban neighborhoods in the future, according to a growing number of experts. Denser mixed-use neighborhoods with a variety of uses located within easy walking distance of housing units are expected to capture a growing proportion of the housing market. Land uses that support new residential development, such as neighborhood commercial, institutional, infrastructure, and parks/open space can be expected to grow proportionately.

Economic Growth – Due to continued population and employment growth, Fort Worth can expect a significant amount of land to be developed for new businesses and industry. Assuming current land use proportions remain consistent over time, approximately 2,000 new acres of commercial and industrial land use could be developed by 2032.

Market Demand – Depending on several related variables, including but not restricted to demographics and socio-economic characteristics of the local population, local and regional economic trends, area land prices, and fuel and construction costs, market demand will impact the amount and location of various land uses. The future supply in acres of any given land use, such as high-density downtown housing or commercial uses in sparsely populated areas of the city, should not exceed the anticipated demand for a particular land use in the proposed area. However, forecasted land use designations can be modified in Comprehensive Plan annual updates to more realistically match the needs reflected by the existing market demand. Excessive reliance on current market demand can hamper creativity and restrict options. For example, the multifamily market in Downtown was an untapped resource until it was introduced and found successful.

Transportation Access – Land use decisions are often based on available access to various modes of transportation. Freeways and arterial streets will attract high density residential, commercial, and warehouse/distribution uses. Passenger railroads, including light rail and streetcar lines, attract high density residential, commercial, and office uses adjacent to stations. Freight railroads and rail yards attract industrial uses. Airports discourage residential use, yet encourage hotels, conference facilities, light industry, and distribution uses. On the other hand, transportation facilities sometimes follow land use decisions, particularly where rapid development occurs. For example, passenger rail lines are often built after dense development has

Airport Noise Level and Land Use Compatibility



These maps depict residential areas adversely affected by airport noise.
(Source: Planning and Development Department, 2009.)

occurred, and sufficient ridership warrants the expense.

Environmental Constraints – The existing environmental conditions greatly impact the type of land uses developed. Near floodplains, buildings must be constructed above the 100-year flood level, unless used for recreational purposes. Soils, slope, and depth to rock can have a significant impact on development costs and viable land use options for any particular site. Odors from wastewater treatment plants and landfills tend to discourage residential development, especially downwind of these facilities. Truck traffic from batch plants or noise from railroads, rail yards, freeways, and airports also discourages residential land uses. By state law and City ordinance, gas wells may be located in any zoning district or future land use category. Adjacent development may be impacted by drilling, truck traffic, and the perception of hazards associated with gas wells.

Airport noise, in particular, can be incompatible with residential uses. The 2008 Joint Land Use Study (JLUS), funded by the U.S. Department of Defense, encourages compatible land uses within 65 dnl (24 hour day-night noise level) noise contours and especially in the Accident Potential Zones at the ends of the runway, while discouraging residential uses. While the JLUS is focused on the Naval Air Station Fort Worth / Joint Reserve Base, its recommendation to discourage residential uses near high noise level areas may be applied to other municipal airports in Fort Worth. Maps show the 65 dnl contour lines around four Fort Worth airports; contours also extend into the city limits south of DFW Airport. Concerns for the effects of noise generally begin at the 65 dnl level with greater concerns at higher levels. In 2011, an Airport Overlay Zone will be created and applied to all the airports to provide an additional level of review and protection of air operations.

Infrastructure Availability – The availability and cost of water and sewer services, stormwater systems, and roads are critical to the timing and density of new land uses. Coordination of future land uses and zoning districts with the Master Thoroughfare Plan allows for planning of the location, classification, and desired capacity of roadways based on the land uses they serve or are expected to serve in the future.

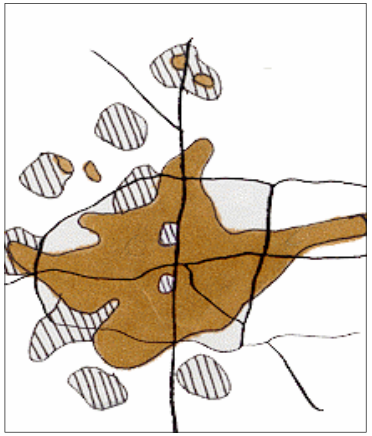
Development Regulations – A property's location within or outside the city limits can influence how the land is used. Outside the city limits, land is not subject to land use or building regulations, but subdivision and street standards apply. Within the city limits, development is regulated by zoning and building codes, as well as subdivision and street standards.

Multiple Growth Center Development Pattern

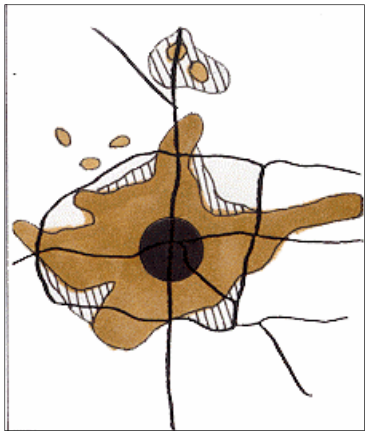
For the last 50 years, development practices have emphasized auto-oriented commercial corridors, isolated business parks, and single-use subdivisions. Metroplex residents generally work in one district, live in another, shop in yet another, and travel among the three on major traffic arterials. This pattern increases commuting times and exacerbates both traffic congestion and air quality problems.

The multiple growth centers concept promotes compact urban land use within designated areas and lower intensities of land use elsewhere in the city. As an alternative to the typical urban/suburban pattern, Fort Worth's Comprehensive Plan advocates for the development of multiple growth centers.

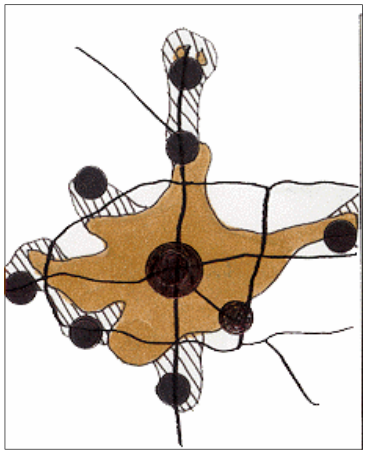
Sample Urban Development Patterns



Dispersed



Compact urban core



Multiple growth centers

The multiple growth center development pattern promotes a relatively high intensity of land use within growth centers and relatively low intensity land use between growth centers. *(Source: Planning and Development Department, 2009.)*

Growth centers are located along highway or rail corridors to facilitate transportation linkages to other growth centers. A network of growth centers can accommodate citywide growth with fewer environmental impacts, less land consumption and traffic generation, and less pollution than a dispersed development pattern. The North Central Texas Council of Governments is also promoting this growth strategy in response to growing concerns over traffic, pollution, and reduced funding for transportation infrastructure. In addition, Vision North Texas, a public/private/academic partnership, recently produced North Texas 2050, a long-range vision plan for the entire Metroplex that also advocates for a multiple growth center development pattern to efficiently accommodate growth within the region. The City's Comprehensive Plan identifies two types of growth centers, industrial and mixed-use. The following general criteria have been developed for each.

Industrial Growth Centers

Intense industrial uses should be located within industrial growth centers that incorporate other compatible uses and are well integrated into the transportation network. An industrial growth center will primarily consist of industrial and commercial uses, with a high concentration of jobs, mostly industrial in nature. Other related and supporting uses include office space and services. Residential uses are generally discouraged within industrial growth centers. Criteria for designation include:

- A high concentration of employees — 10,000+ employees per square mile, and
- The location nearby of one or more major transportation facilities, such as an airport, railroad, highway, public transit station, and/or arterial roadway.

Based on these criteria, eight industrial growth centers have been designated.

Mixed-Use Growth Centers and Urban Villages

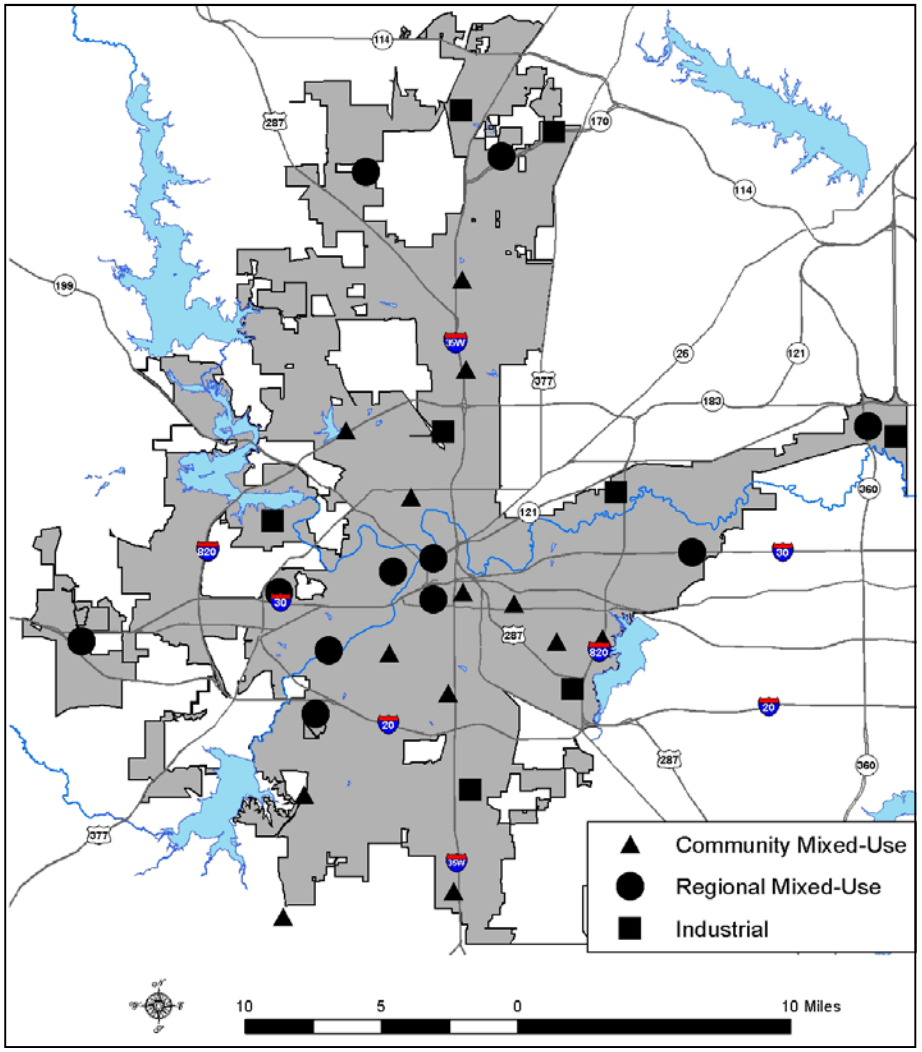
A mixed-use growth center is a highly urbanized place containing many characteristics of a downtown: a concentration of jobs, housing units, schools, parks, and other public facilities, public transportation hubs, pedestrian activity, and a sense of place. Its predominant land uses are residential and commercial. Within a relatively small geographic area, different land uses are found side by side or within the same building. These places tend to be bustling, diverse, and festive.

Mixed-use growth centers differ from commercial corridors in that they are compact (vs. linear), are favorable to pedestrians and public transit (vs. automobiles), have integrated land uses, and have buildings oriented to the street (vs. parking lots). Growth centers support the concept of sustainable development, seeking to balance access, mobility, affordability, community cohesion, and environmental quality.

The potential benefits of mixed-use growth centers include:

- Economic development.
- Protection of single-family neighborhoods.
- Development of multifamily housing at appropriate locations.
- Convenience for residents and workers.
- Reduced reliance upon single-occupancy vehicles.
- Efficiency in the provision of public facilities and services.

Multiple Growth Centers



There are 32 designated growth centers—24 mixed-use and eight industrial. Mixed-use growth centers have a high concentration of jobs and housing, access to public transit and public facilities, pedestrian activity, and a sense of place. Industrial growth centers are similar, but do not have a concentration of housing. *(Source: Planning and Development Department, 2009.)*

- Protection of the environment.
- Improved health due to increased opportunities for pedestrian activities.
- Sense of place.

Criteria for designating new mixed-use growth centers are listed below, with centers often having (or planned to have) three or more of the following characteristics:

- A high concentration of employees — 10,000+ employees per square mile.
- A high concentration of residents — 10,000+ residents per square mile.
- One or more major transportation facilities — an airport, railroad, highway, public transit, or arterial roadway.
- An existing or planned transit-oriented development (TOD).
- Major institution(s) — a university, government facility, or hospital.
- Major tourist destination(s) — 100,000+ visitors per year.

Some mixed-use growth centers serve a large region, while others serve local residents. Of the 24 mixed-use growth centers, 11 are identified as regional growth centers. For example, Downtown and the Cultural District draw visitors that may drive an hour or more to enjoy the special entertainment and cultural activities found there. The 13 community growth centers serve approximately 25,000 to 75,000 people and have a service area radius less than two miles. The functions and characteristics of the two different growth centers will generally be the same, with variations in the size of their service areas and in the intensity of development.

The intensity of development in the various growth centers corresponds to the activity and character of the surrounding area. For example, Downtown is a more intense mixed-use growth center than the Stockyards, yet each has an appropriate mixture of desirable uses. Specific economic development and urban design strategies can be integrated to promote and guide appropriate development within each growth center. With proper guidelines established, each growth center should achieve the critical mass of employment necessary to support various additional uses.

Zoning for Growth Centers

The table opposite lists zoning classifications that tend to be appropriate for property within regional and community mixed-use growth centers. Mixed-use, multifamily, and commercial zoning classifications are the most desirable because they provide the density of jobs and residential units needed to create a vibrant urban sense of place. Townhouse, duplex, and similar residential zoning classifications are usually acceptable in appropriate locations on the periphery of the mixed-use core. The City's new Urban Residential (UR) zoning classification provides an appropriate transition zone between higher and lower density residential areas.

Most single-family zoning districts, however, are not appropriate within mixed-use growth centers. While mixed-use growth centers may contain some single-family dwellings, this low-density land use should not predominate where the City seeks to generate a high level of economic and pedestrian activity. Single-family residential (less than four units per acre), low density residential (less than nine units per acre), and neighborhood commercial uses are encouraged in the areas located between and outside of growth centers.

Appropriate Zoning Classifications for Mixed-Use Growth Centers in Fort Worth

ZONING CLASSIFICATIONS	USUALLY ACCEPTABLE	MOST DESIRABLE	
		COMMUNITY	REGIONAL
AG			
CF, PD	✓		
A-5, A-7.5, A-10, A-21, A-43, A-2.5A			
AR, B, R1, R2	✓		
CR, C, D, UR		✓	✓
ER, E		✓	✓
MU-1, MU-1G		✓	✓
FR, F, G,			✓
MU-2, MU-2G, H8, NS*, TU*			✓
I, J, K			

*H, NS, and TU are allowed only in Downtown, Near Southside, and Trinity Uptown, respectively.

Mixed-use, multifamily, and commercial zoning classifications are most desirable in mixed-use growth centers. Agricultural, single-family, light industrial, and heavy industrial zoning classifications are generally inappropriate.
(Source: Planning and Development Department, 2009.)

Industrial zoning districts are also inappropriate within mixed-use growth centers because the land use is incompatible with a multifamily residential environment. Similarly, agricultural zoning is generally inappropriate as a permanent classification for property within mixed-use growth centers, but may be acceptable as an interim classification for newly annexed property. Because AG zoning permits very little to no density, it is desirable for property within the takeoff and landing flight path of any airfield.

Compact mixed-use development is also encouraged in certain areas targeted for redevelopment along commercial corridors. These areas are known as urban villages and are described in Chapter 10: Economic Development. Urban villages outside of growth centers are depicted as Neighborhood Commercial on the future land use maps in Appendix C. The urban village development program promotes mixed-use and Urban Residential zoning in designated villages.

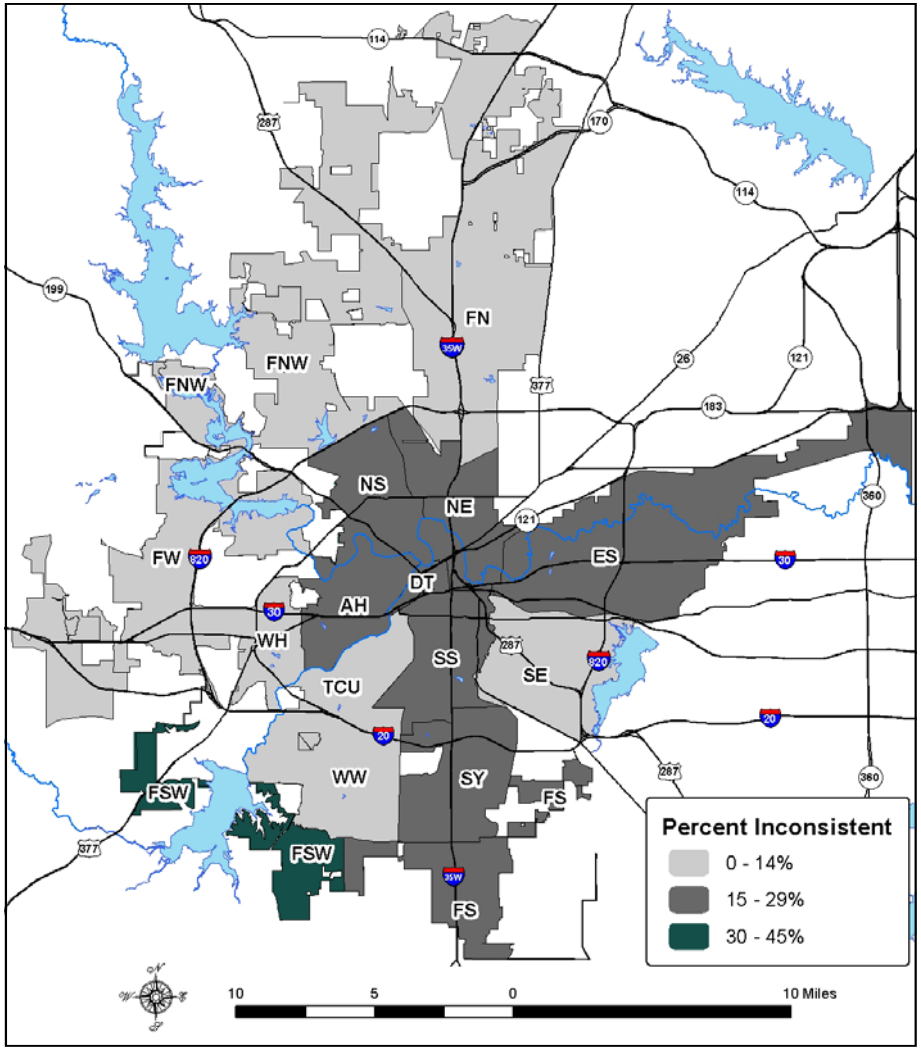
Transit-oriented development (TOD) is similar to an urban village, but designed to surround, incorporate, and support a rail transit station. The integration of mixed uses and a variety of higher density housing choices within an easy walking distance of a rail station promotes a more sustainable development pattern, while reducing automobile dependence, improving air quality, and encouraging healthier lifestyles through more physical activity. Mixed-use and Urban Residential zoning, or an appropriate form-based zoning classification, would be beneficial in a TOD- particularly within one-quarter mile of the rail station or along a modern streetcar line.

Land Use and Zoning Conformance

The future land use plan, illustrated by planning sector in Appendix C, is used to guide the location of appropriate places to live, conduct business, and play. Because land use decisions and transportation infrastructure investments are most effective and efficient when they are mutually supporting, the City's future land use maps also depict key transportation features, such as existing and planned passenger rail stations and the City's Master Thoroughfare Plan. The City of Fort Worth and private service providers use the land use plan to determine future infrastructure and service needs. Elected and appointed officials, such as the City Council or Zoning Commission, use the land use plan and refer to pertinent policies when making decisions regarding zoning, annexation, budgeting, and major public facilities expenditures. Definitions of land use categories are included in the Glossary at the end of the Comprehensive Plan.

Current zoning of developed and vacant land in Fort Worth does not consistently conform to the proposed land uses in Appendix C. Some areas of the city were first zoned almost 70 years ago, with major changes only occurring in recent years. Many areas were annexed during periods of rapid growth, and subsequently required new zoning other than Agricultural. The zoning districts for many annexed areas have changed over the years, often to allow more intensive land uses. However, these rezonings did not always stimulate new development. As a result, many neighborhoods had zoning classifications that do not conform to current land uses.

Percentage of Incorporated Land Area within Each Sector for which Zoning is Inconsistent with the Future Land Use Plan, 2011



Currently, 14.5 percent of land area is zoned inconsistently with the City's future land use maps. This has decreased since 2000 when 21 percent of land area was inconsistent. (*Source: Planning and Development Department, 2011.)*

To guide growth and development effectively and efficiently, the City's zoning districts should generally be used to achieve conformance with the adopted Comprehensive Plan. Because a large number of zoning districts and existing uses did not conform to the future land use designations in the plan, the City Council established two voluntary processes for initiating changes that promote neighborhood consensus for rezoning**:** Council-initiated and petition-based. More information may be found in Chapter 22: Development Regulations.

An active council-initiated rezoning effort since 2001 has adjusted thousands of acres to zoning districts that conform to the proposed future land uses in Appendix C. As a result, only approximately 14.5 percent of the land within the city limits is not consistent with the future land use plan and may be rezoned in the future. This represents a reduction of almost four percent in zoning inconsistency since 2009. About half of the remaining inconsistently zoned area is currently undeveloped. The map on this page shows, by planning sector, the extent to which remaining zoning districts do not conform to the desired land uses. The percentage of the area within a sector that does not conform to the future land use plan ranges from less than six percent in the Far North sector to 28.7 percent in the Southside sector. In 2009, the Northside sector had the highest amount of property not in conformance at 48 percent. However, following several large Council-initiated zone changes in 2011, that number decreased to 17.2%.

The following sections include goals outlining Fort Worth's preferred development patterns and planning policies to guide development patterns and the location of specific land uses.

GOALS

Achieve a multiple growth center development pattern by encouraging higher intensity residential and commercial uses within mixed-use growth centers, and higher intensity industrial and commercial uses within industrial growth centers.

- Increase new residential units in mixed-use growth centers, urban villages, and transit-oriented development areas so that one third of new residential development occurs in these locations. It is estimated that this would equal approximately 30,000 units over a 20-year period.
- Increase the total land area zoned for mixed-use or urban residential development in designated mixed-use growth centers, urban villages, and proposed transit-oriented developments (TODs) from 5,000 to 7,500 acres by 2014.

Improve land use efficiency, mobility, and air quality.

- Encourage developments that create a network of interconnected local streets and trails that facilitate more direct vehicle and pedestrian access between nearby uses.

Ensure that the City's zoning regulations and districts generally conform to the adopted Comprehensive Plan.

- Annually evaluate and resolve any inconsistencies between the zoning ordinance and the comprehensive plan.

Mixed-Use Growth Centers
Regional
Alliance Gateway West
Centreport
Clear Fork
Cultural District
Downtown
Eastchase
Hulen / Cityview
Nance Ranch*
Near Southside
Ridgmar
Walsh Ranch*
Community
Alliance Town Center*
Fossil Creek
La Gran Plaza
Loop 820 East / Lake Arlington
Marine Creek*
Miller / Berry*
Near Southeast*
Polytechnic / Texas Wesleyan
SH 121 / FM 1187*
Spinks / Huguley
Stockyards
Summer Creek TOD*
Texas Christian University
Industrial Growth Centers
Alliance Airport
Alliance Gateway East
Carter Industrial Park
Centreport
Meacham Airport
Loop 820 East / Lake Arlington
NAS-JRB / Lockheed-Martin
Riverbend

Of the 24 mixed-use growth centers, 11 are designated as regional and primarily contain uses that serve both Fort Worth and the surrounding region. The 13 community mixed-use growth centers primarily serve the immediate neighborhoods within Fort Worth. The eight industrial growth centers are considered regional, and two are located in the Alliance Airport area.

* Indicates growth centers that do not currently meet the criteria, but have the potential to do so.

(Source: Planning and Development Department, 2009.)

POLICIES AND STRATEGIES

The following policies and strategies are prescribed for development and redevelopment of the City. They should be used as a guide for evaluating proposed land development projects.

Policies

- Accommodate higher density residential and mixed uses in areas designated as a mixed-use growth center on the City's future land use maps.
- Include projects in future Capital Improvement Programs that support the growth center concept, transit-oriented development, and urban villages.
- Encourage mixed-use projects in mixed-use growth centers, transit-oriented developments, and urban villages.
- Adopt a sustainable development policy that promotes the following: 1) Land use and transportation practices that promote economic development while using limited resources in an efficient manner; 2) Transportation decision-making based on land use, traffic congestion concerns, vehicle miles traveled, and the viability of alternative transportation modes; and 3) Balance among accessibility, affordability, mobility, community cohesion, and environmental quality. (For more information, see Chapter 11: Transportation and Chapter 18: Environmental Quality.)
- Promote location of multifamily units within walking distance of public transportation, employment, recreation, and/or shopping to increase accessibility and decrease vehicular traffic generation.
- Locate multifamily units adjacent to collector streets, arterial streets, or rail transit stations to provide the increased level of transportation services necessary for the greater number of residents.
- Encourage Urban Residential and Low Density Residential as transitional uses between Single-Family Residential and high density uses.
- Encourage small-lot single-family zoning districts (i.e. AR and A-5) on the periphery of mixed-use growth centers, where the City seeks to concentrate employment and public services.
- Link growth centers with major thoroughfares, public transportation, trails, and linear parks
- Encourage development type and intensity appropriate to existing or planned street infrastructure by coordinating future land use map changes with the Master Thoroughfare Plan and an adopted Complete Streets policy.
- Encourage clustering of development sites within new subdivisions to avoid steep slopes (greater than 15%) and to conserve 100-year floodplains, existing tree cover, wildlife habitat, natural waterways storm water detention areas, riparian buffers along natural waterways, and archeologically significant sites
- To protect water quality and provide for connected green spaces, encourage parks, bike trails, and open space within floodplains and adjacent water bodies.
- Encourage the provision of open space within new developments, with the goal of linking open spaces within adjoining subdivisions.

Land Use and Zoning Classifications

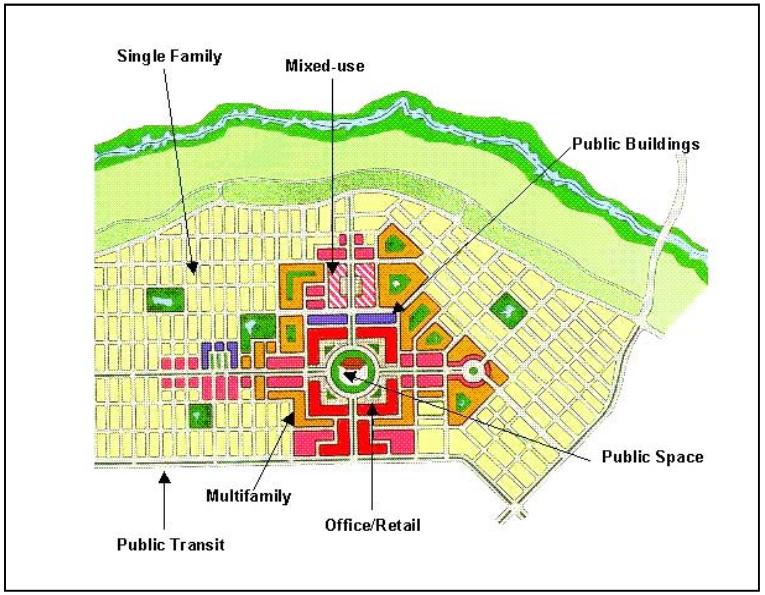
LAND USE	DEFINITION	ZONING
SPECIAL		
Vacant, Agricultural	Vacant, agriculture	AG
Rivers, Lakes, Streams, 100 Year Flood Plain	Water features, 100-year flood plain	Not applicable ALL
Infrastructure	Roads, railroads, airports, utilities	Not applicable ALL
Parks, Recreation, Open Space	Public or private recreation, or passive land	Not applicable ALL
RESIDENTIAL		
Rural Residential	1+ acre single-family	A-2.5A, A-43
Suburban Residential	1/2+ acre single-family	A-21
Single-family Residential	3500+ sq. ft. lot single-family	A-10, A-7.5, A-5, AR
Manufactured Housing	Manufactured home parks and subdivisions	MH
Low Density Residential	2500+ sq. ft. lot single-family, two family, patio homes, townhouses, cluster housing	B, R1, R2
Medium Density Residential	Up to 24 units/acre multifamily	CR, C, D
High Density Residential	>24 units/acre multifamily, mixed-use multifamily in growth centers	MU-1, MU-1G, PD, UR
INSTITUTIONAL		
Institutional	Schools, churches, government, human services, utilities, community centers, day care	**Schools and Churches ALL, others** CF, PD
COMMERCIAL		
Neighborhood Commercial	Retail, services, offices and mixed uses serving daily needs for a local market area	All Residential, ER, E, MU-1, MU-1G, PD
General Commercial	Retail, services, offices, entertainment mixed uses serving occasional needs for a larger market area	All Residential, FR, F, G, MU-1, MU-1G, MU-2, MU-2G PD
Mixed-Use Growth Center	Retail, services, offices, entertainment, mixed uses, and multifamily residential; Community Growth Centers are less intensive, and Regional Growth Centers are more intensive	AR, B, R1, R2, CR, C, D, all Commercial, MU-1, MU-1G, MU-2, MU-2G, H*, NS*, TU*
INDUSTRIAL		
Light Industrial	Warehousing, transportation, light assembly, outside storage	All Commercial, MU-2, MU-2G, I, PD
Heavy Industrial	Heavy manufacturing, outside storage	All Commercial & Industrial
Industrial Growth Center	Industrial and commercial uses serving a large region	All Commercial & Industrial
OTHER		
Special and Hazardous Uses	Bed & breakfast, aviation, recycling centers, refining, cell towers, concrete batch plant	Special Exception, PD

Land uses are defined and categorized with the appropriate zoning classification. Fort Worth has 33 base zoning districts, which promote a desirable development pattern while separating incompatible land uses. *(Source: Planning and Development Department, 2009.)*

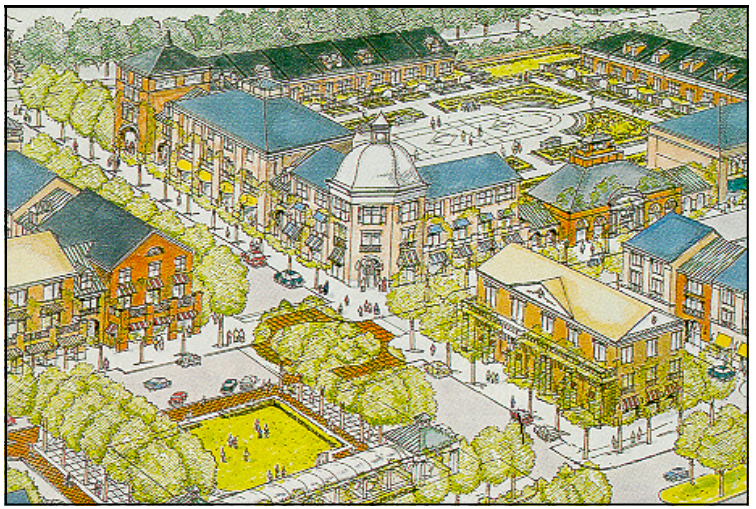
*H, NS, and TU are allowed only in Downtown, Near Southside, and Trinity Uptown, respectively.

- Locate public neighborhood parks within easy access of residents (less than one-half mile).
- Encourage appropriate development and redevelopment within central city commercial districts and neighborhoods.
- Promote appropriate infill development of vacant lots, old commercial centers (greyfields), and contaminated sites (brownfields) within developed areas, particularly in the central city.
- Provide for and maintain interconnectivity of streets and trails, especially within residential subdivisions, to reduce vehicle trips on arterial streets, increase efficiency, reduce air pollution, distribute traffic, improve access to public places, improve efficiency in providing services and deliveries, and ensure access for emergency services.
- Encourage the use of parallel local access streets along collector and minor arterial roadways to allow the front façade of homes to face the street without the need for multiple driveway curb-cuts on the main street, thereby preserving traffic safety while increasing the pedestrian friendliness of the collector or minor arterial.
- Identify and designate on future land use maps mixed-use neighborhood centers and/or new mixed-use growth centers in rapidly developing areas, based on proximity to future rail transit and key transportation intersections.
- Encourage new development adjacent and connected to previously developed or platted areas in order to utilize existing utility and road infrastructure and services, thereby optimizing public and private investments and discouraging sprawl development.
- Locate single-family homes adjacent to local or collector streets.
- Preserve the character of rural and suburban residential neighborhoods.
- To promote orderly growth in developing areas, the City should generally support single-family residential development with lot sizes compatible with surrounding single-family lot sizes. The City should support lower density, larger-lot single-family residential zoning districts (i.e. A-7.5 through A-2.5A) in more remote locations.
- Separate manufactured housing into single parks or subdivisions, buffered and separated from traditional single-family residential development.
- Support zoning changes that reduce the amount of vacant land zoned for multifamily residential development outside of designated growth centers, urban villages, and transit-oriented developments (TOD).
- Protect residential neighborhoods from incompatible land uses, disinvestments, encroachment, speculation, demolition, neglect, and other negative forces.
- Do not locate residential uses or schools in areas adjacent to airfields having a noise level of 65 or more decibels DNL (average Day or Night Level)
- Do not locate residential uses, higher density uses, or other incompatible land uses at the end of airfield runways or in the Accident Potential Zones of the NAS-JRB.
- Shelters for indigent, needy, homeless, or transient persons may generally be appropriate in general commercial and light industrial areas and in regional mixed-use growth centers. Shelters are not appropriate in industrial growth centers and heavy industrial areas.

Mixed-Use Growth Centers and Urban Villages



This diagram depicts a hypothetical mixed-use growth center, which is oriented to public transit, has mixed uses or higher density development, public spaces, and is surrounded by single-family development. *(Source: Planning and Development Department, 2009.)*



An artist's rendering of an urban village, emphasizing multiple-story structures, public spaces, wide sidewalks, and narrow tree-lined streets. *(Source: Urban Land Institute, 1999.)*

- Encourage the development of Airport Overlay Districts to ensure land use compatibility while providing additional protections to airport operations.
- Locate large commercial and institutional uses adjacent to arterial streets, preferably at the intersections of other arterials and highways.
- Locate large industrial uses along freight rail lines, highways, or airports within industrial growth centers and other appropriate locations.
- Separate incompatible land uses with buffers or transitional uses. Some land uses have attributes such as height, proportion, scale, operational characteristics, traffic generated, or appearance that may not be compatible with the attributes of other uses.
- Proposed uses that may be detrimental to health, safety, and welfare (such as hazardous materials, airports, mining, landfills, gun ranges, and manufacturing of certain materials) should continue to be evaluated on a case by case basis before approval.
- Coordinate future land uses with the Master Thoroughfare Plan, Bike Fort Worth Plan, and Transit-Oriented Development (TOD) Plans.

Strategies

- Promote traditional neighborhood and other pedestrian-oriented developments, which encourage human interaction, walking, bicycling, mixed uses, slower traffic, public places, and attractive streetscapes. Traditional neighborhood developments adopt many of the same characteristics of older neighborhoods and towns, such as a grid street pattern, mixed land uses, inconspicuous parking facilities, neighborhood parks, public buildings, and multifamily homes, all within walking distance of most residents.
- Plan for, facilitate, and aggressively pursue appropriate transit-oriented development (TOD) at existing and future transit station locations.
- Promote transit-oriented development, which encourages compact urban development adjacent to transit stations. Mixed uses in a single building, minimal setbacks, and taller structures help achieve the higher densities necessary to support transit. Retail businesses and services for commuters should be located adjacent to transit stops, between the rail platform and parking facilities.
- Maximize area of permeable surfaces in developments to reduce stormwater run-off.
- Promote the use of Low-Impact Development techniques to reduce erosion and sedimentation of rivers, lakes, and streams.
- Leave floodplains in their natural state (with bike trails encouraged) to improve water quality and minimize flooding.
- Encourage the use of floodplains as a boundary between incompatible land uses.
- Encourage new development in character with the existing neighborhood scale, architecture, and platting pattern, while working to improve pedestrian, bicycle, and transit access between adjacent neighborhoods and nearby destinations.
- Promote measures to ensure that all types of residential developments are compatible in scale to abutting residential developments. A dramatic difference in units per acre should be discouraged for new development immediately adjacent to existing development or platted and zoned property, unless mitigation is provided to minimize the effects of the new use.
- Encourage single-family residential development and outside of growth centers.
- Encourage infill development of compatible, single-family homes in existing neighborhoods to preserve and protect residential neighborhoods.
- Encourage locating multiple-unit residential structures on corner lots.
- To the extent possible, locate elementary schools, parks, and neighborhood commercial uses within walking distance of most homes.
- Acquire adequate rights-of-way for future improvements to various modes of transportation (sidewalks, trails, bicycle routes, private vehicles, emergency vehicles, and public transportation, including rail) through dedication and donation.
- Work with independent school districts in growing areas to identify future school sites that can be served by existing or currently planned infrastructure. Depict the identified sites on the City's future land use maps.
- Encourage and facilitate the location and design both urban and suburban of schools to maximize walkable, bikeable, and transit connectivity with all surrounding residential areas.
- Locate elementary and middle schools on collector streets.
- Locate high schools on arterial streets.
- Identify institutional uses (schools, churches, etc.) of five acres or more on the future land use maps.
- Improve the design, function, and appearance of commercial corridors by addressing traffic safety issues, excess parking, lighting, landscaping, outdoor storage, refuse containers, the amount and size of advertising, and related issues.
- Encourage screening, reduction, and/or redirection of objectionable characteristics of commercial uses adjacent to residential areas. These attributes may be noise, glare, signs, parking areas, loading docks, and refuse collection.
- Use traffic impact analysis to determine the transportation system's ability to serve proposed land uses.